The four parts already published, each complete in itself, comprise the anatomy of Mammalia, Birds, Reptiles and Fishes, -of the vertebrate animals therefore, and may be bound separately as a work perfect in itself. One word in reference to the translation : this we find faithful, and, like the original, terse and to the point; admirable for reference upon particular subjects, if less agreeable to read in the way we do a novel. Mr. Tulk is himself an excellent anatomist and naturalist, and deserves the thanks of all true friends of natural history for the pains he has taker in giving them a compendious guide to the very elements of all zoological science.

## PROCEEDINGS OF LEARNED SOCIETIES.

April 23, 1844.-William Yarrell, Esq., Vice-President, in the Chair.
A continuation of Mr. Sylvanus Hanley's paper on new Tellince was read, containing the following descriptions:-

Tellina sincera. Tel. testa T. carnariæ simillima, sed majore, latiore, compressd et albida; striis tenuioribus; ligamento valdè angusto ; natibus paululùm ad latus anticum spectantibus; margine ventrali tantìm subarcuato; dentibus lateralibus conspicuis, subaquidistantibus. Long. 1•20; lat. $1 \cdot 40$ poll.
Hab. - ? Mus. Cuming, Metcalfe.
Extremely like T. carnaria, but larger, broader, and more flattened. The oblique striæ are minute, and almost entirely disappear in aged specimens.

Tellina Senegalensis. Tel. testa T. splendidæ simillima, sed striis sulcisque exilioribus magisque confertis; extremitate etiam postica, striis arcuatis obliquis in utrdque valvuld, ornata; superficie internd purpurea, albo posticè biradiatd. Long. 0.80 ; lat. 1 poll.
Hab. Senegal.
An extremely common shell, bearing some slight resemblance to carnaria, and has probably been hitherto neglected, from its close approximation to the splendida of Anton.

Tellina incarnata. Tel. testd obovatd, subobliqud, incquilaterali, ventricosd, solidd, incarnatd aut albido-rosed, impolitd; striis elevatis concentricis tenuissimis, strias radiantes elevatas confertissimè decussantibus; margine ventrali arcuato, posticè sursùm accliviore ; dorsali anticè declivi et prope nates paululùm incurvato, posticè elevatiore subarcuato et subitoे declinante; ligamento infosso; superficie internd flavescente, margines versus subrosed; dentibus lateralibus maximis. Long. $0 \cdot 70$; lat. $0 \cdot 95$ poll.
Hab. San Nicholas, Zebu; sandy mud, low water.
This graceful species is allied in sculpture to the decussata of Lamarck, but the shape and colouring easily distinguish it. In almost every adult specimen the tips of the beaks are chalky white, the umbones yellow, and the ligamental edge rosy.

Tellina Lyra. Tel. testd ovali, tenui, compressd, mitidiusculd,
alba, striis concentricis elevatis ornatd, interstitiis lavigatis ; margine ventrali ad utramque extremitatem arcuato, medio convexiusculo; dorsali posticè altiore, convexo satisque declinante, anticè prope lunulam excavatam, aut horizontali aut leviter acclivi; latere antico paululùm longiore, rotundato; extremitate posticd obtusd; natibus acutis, prominentibus ; flexurd obsoletd; dentibus lateralibus distinctis, antico approximato, postico parvo, remotiore. Long. 1-80; lat. $2 \cdot 60$ poll.
Hab. Tumbez, Peru.
This most exquisite shell will probably prove inequivalve, but as I have never met with any but left valves, I can only judge so from analogy. Although very different in shape, its texture and the excavated dorsal areas remind us of Burnetti. The ventral fold is obsolete, and the situation of the umbonal ridge is indicated by a linear carina, which is only separated from the dorsal edge by a narrow concavity.

Tellina philippinarum. Tel, testd ovatd aut subovatd, tenui, subaquilaterali, intus extusque candidd, nitidd, concentricè et tenuissimè striat d; margine ventrali arcuato, posticè sursùm acclivi; dorsali antico brevi, recto, subdeclivi; latere postico subcuneiformi; ligamento prominulo; extremitate anticd obtusd; cardine dente laterali (in junioribus subobsoleto) antico subapproximato. Long. $0 \cdot 70$; lat. 1 poll.
Hab. St. Nicholas, isle of Zebu, and Jimmamailan, isle of Negros.
This shell, which appears to be common throughout the Philippine Islands, reminds us by its shape of the T. solidula. It is rather variable in its proportions, and but rarely attains the assigned dimensions. In aged specimens the vicinity of the umbones is usually of a flesh-colour or tawny orange.

Tellina Listeri. Tel. testd obovata, solidd, ventricosd aut subventricosa, aquilaterali, glabrd, extus intusque candida; margine ventrali medio subrecto; dorsali anticè arcuato paululùmque declivi, posticè recto, declivi; latere antico dilatato, obtusè rotundato ; postico obtusissimè biangulato ; ligamento magno, infosso; natibus obtusis; umbonibus plerumque subplanulatis; cardine dente laterali antico subapproximato. Long. $2 \cdot 3$; lat. $3 \cdot$ poll.
Hab. Senegal. Mus. Cuming, Hanley.
This species appears to be represented in Lister's ' Historia Conchyliorum,' plate 288. fig. 235. Although in general shape it is approached by many of its section (Telline with a single lateral tooth), its superior size and solidity render it remarkable.

Tellina pumila. Tel. testd T. philippinarum simillimd, sed angustiore ; margine ventrali medio subrecto; dorsali utrinque recto aut subconcavo, anticè paululùm declivi, latere postico cuneiformi; margine antico recto, verticali. Long. 0.60 ; lat. 0.90 poll.
Hab. Valparaiso; sandy mud, from seven to thirty fathoms.
Easily to be confused with T. philippinarum, but is decidedly narrower and the margins less convex. The front dorsal edge, which
is longer and less sloping than in that species, forms an angle with the straight and direct anterior margin.

Tellina Culter. Tel. testd parva, ovatd, inœquilaterali, tenuiusculd, convexa, nitidd, intus extusque aurantio-rosed, lavigatd; margine ventrali anticè arcuato, posticè sursùm acclivi; dorsali anticè magis minusve convexo satisque declivi, posticè recto et valdè declivi; latere antico producto, ad extremitatem obtusè rotundato ; postico acuminato ; natibus acutis; ligamento vix prominulo ; fexura ventrali obsoleta; cardine dente laterali antico parvo, approximato. Long. 0.35 ; lat. 0.55 poll.
Hab. Cagayan, province of Misamis, Mindanao; twenty-five fathoms, sandy mud.

This species is closely allied to the tenuis of our own shores, but may be distinguished by its acuminated extremity. In young specimens there are indications of concentric striæ near the front of the ventral margin.

Tellina Corbuloides. Tel. testd subovali, incquivalvi, solidd, subventricosa, sublavigata, roseo-incarnatd (intus plerumque aurantiorubra) ; margine ventrali sinistra valvula, ultra marginem convexiusculum alterius, prominente ; latere antico breviore, obtusè acuminato; extremitate posticd rotundatd; ared dorsali posticd in adultis subplanulatd; natibus obtusis; flexurd ventrali distincta; cardine dente laterali, parvo, approximato, antico.
Var. Testd extus intusque candidd. Long. $0 \cdot 80$; lat. $1 \cdot 20$ poll.
Hab. Catbalonga, isle of Samar; ten fathoms, soft mud.
The general appearance of this shell gives us the idea of a Corbula. It is covered when fresh with a thin fugacious epidermis, which reflects the most brilliant prismatic colours.

Tellina Cycladiformis. Tel. testa parva, rotundato-subtrigona, tenui, ventricosd, intus extusque incarnatd aut pallidè rosed, sublavigatd ; margine ventrali convexo ; dorsali utrinque declivi, convexiusculo ; latere antico rotundato et paullo breviore; extremitate posticd obtusè subangulatd ; ligamento prominulo ; flexurá costaque umbonali obsoletis; cardine dente laterali parvo, approximato, antico. Long. $0 \cdot 20$; lat. $0 \cdot 25$.
Hab. St. Nicholas, Zebu.
Not unlike pisiformis, but destitute of oblique striæ.
Tellina insculpta. Tel. testá oblongo-elongatd, solidiusculd, compressd, aquilaterali, extus intusque candidd ; sulcis confertis concentricè exaratd, striisque tenuissimis radiantibus (prasertim posticè) decussatd; margine ventrali elongato, subrecto; dorsali utrinque subrecto, subdeclivi; extremitate posticd subbiangulatd; flexurd ventrali distinctd; cardine dente laterali quamplurimum approximato, antico. Long. 1 ; lat. 2 poll.
Hab. Chiriqui, West Columbia; sandy mud, three fathoms.
This unique and elegant shell possesses the shape and general appearance of a Psammobia. The single anterior lateral tooth is so close to the primary ones, that the hinge appears to be composed of
three cardinal teeth in the left valve. Beyond the almost obsolete umbonal ridge the concentric sulci become broken into small scales. The delicate radiating striæ are quite obsolete in front. The shell seems slightly inequivalve.

Tellina inequalis. Tel. testd subovata, valdè inequilaterali, solidd, convexd, candidd, tenuiter striatd; striis supernè obliquis, infernè concentricis, flexuosis; supra costam umbonalem inconspicuam, rugis erectis flexuosis, asperatd ; margine ventrali convexissimo; dorsali anticè subincurvato et valdè declivi, posticè brevi, recto, subdeclivi ; latere antico producto, ad extremitatem attenuato, rotundato; extremitate posticd obtusd ; natibus acutis; lunuld distinctd; superficie internd candidd, aut flavescente; cardine dente laterali magno, subremoto, antico. Long. $0 \cdot 90$; lat. $1 \cdot 20$ poll.
Hab. Ceylon. Mus. Cuming.
An unique specimen of this curious shell is in the museum of Mr . Cuming, and reminds us in many particulars of the Tellina Gargadia; but that species is neither so narrow nor so greatly inequilateral, its oblique striæ do not extend over the posterior portion of the shell, and its hinge is clearly provided with two lateral teeth. The elevated flexuous wrinkles radiate down the umbonal slope in three distinct lines.

Tellina Felix. Tel. testd subovali, solidiusculd, valdè incquilaterali, convexiusculd, nitidd, lavigata, intus extusque rosed; margine ventrali vix convexiusculo; dorsali anticè vix declivi, convexo, posticè valdè declivi; latere postico brevissimo, obtusè subtruncato, infernè subangulato ; extremitate anticd rotundatd ; costa umbonali et flexurd ventrali subobsoletis; cardine dente laterali magno, approximato, antico. Long. $0 \cdot 38$; lat. 0.80 poll.
Hab. Panama; sandy mud, six to ten fathoms.
This elegant little shell approximates in form to the British Donacina, but differs as well in colouring as in sculpture and teeth.

Tellina columbiensis. Tel. testd ellipticd aut oblongo-elliptica, compressiusculd, subtenui, levigatd, intus extusque albidd, epidermide tenuissimd, fulvo-cinered indutâ; margine ventrali medio convexiusculo, utrinque arcuato; dorsali utrinque convexo, anticè paulld, posticè satis declivi; latere antico longiore, rotundato; extremitate posticd acuminatd; flexura subobsoletd; dentibus primariis minimis, lateralibus nullis. Long. $1 \cdot 70$; lat. 3 poll.
Hab. Monte Christi, West Columbia; sandy mud, twelve fathoms.
Its more compressed valves and minute teeth will distinguish it from the few species which are allied to it in outline. The hingemargin is very short and rather broad. The general shape is that of T. Soverbii.

Tellina Souleyeti. Tel. testa oblonga, tenuiuscula, convexodepressâ, intus extusque albidd, lavigata ; margine ventrali magis minusve convexo; dorsali anticè convexiusculo et subdeclivi, posticè subrecto aut subretus̀o et valdè declivi; flexurd costdque umbonali distinctis ; ligamento infosso ; natibus acutis; latere antico Ann. \& Mag. N. Hist. Vol. xv.
longiore, rotundato; extremitate posticd subrostratd; dentibus lateralibus nullis. Long. $0 \cdot 75$; lat. $1 \cdot 25$ poll.
Hab. St. Nicholas, Zebu; sandy mud at low water.
I have named this species in honour of my friend M. Souleyet, whose investigation of the Pteropoda promises to be of high interest to natural science.

Tellina undulata. Tel. testd oblongd, tenuissimd, compressa, impolita, intus extusque albida, subobliquè et concentricè undulatd; margine ventrali convexo; dorsali anticè subrecto et vix declivi, posticè incurvato, satisque declivi; latere postico brevi, attenuato, rostrato; flexura costdque umbonali distinctis; natibus acutis; dentibus lateralibus nullis. Long. $0 \cdot 40$; lat. $0 \cdot 80$ poll.
Hab. St. Elena, West Columbia; sandy mud, six fathoms.
The oblique waves are chiefly conspicuous in front of the shell, and become concentric posteriorly. This character is so distinct that the species cannot possibly be confounded with any of this genus. The general shape is that of crucigera; the fold is very distinct and the ligament sunken.

Tellina micans. Tel. test subovali, tenui, nitidissimd, compressd, nived, lavigatd; margine ventrali convexo; dorsali anticè convexiusculo, subhorizontali; latere antico longiore, ad extremitatem rotundato aut obtuso ; postico cuneiformi ; flexurd costaque umbonali obsoletis ; natibus obtusis ; dentibus lateralibus nullis. Long. 0.50 ; lat. 1 poll.

Hab. Catbalonga, isle of Samar, and Bias, isle of Negros.
Bears a close resemblance to the margaritacea of Lamarck, but that species is not devoid of lateral teeth. It is a glassy-looking shell and highly polished; the surface too is sometimes slightly opalescent.

Tellina cuspis. Tel. testd ovatd, solidiusculd, convexd, nitidiusculd, rosed, anticè et infernè substriata; margine ventrali arcuato; dorsali utrinque subdeclivi, anticè convexo, posticè recto aut subretuso ; flexurd costdque umbonali distinctis; latere antico paululùm longiore, rotundato; postico subacuminato, subrostrato; dentibus lateralibus nullis. Long. $1 \cdot 20$; lat. 1.85 poll.
Hab. ? Mus. Cuming, Walton, Metcalfe.
A beautiful shell, whose general appearance is that of an abbreviated specimen of the T. depressa of Lamarck, which latter must resume its prior appellation of incarnata, being decidedly the species so designated by Linnæus.
" Descriptions of Marginelle collected during the voyage of H.M.S. Sulphur, and from the collection of Mr. Cuming," by Mr. Hinds.

Marginella, Lamarck.

## Section I. Phanospira.

Marginella piperata. Mar. testd obovatd, maculis parvis nigris et albidis, interdum longitudinaliter coalitis, confertim ornata; spird retuso-conicd, obtusá; anfractu ultimo rotundatè angulato;
spira lined unica comitatd ; labro incrassato, extùs nigro maculato, intùs lavi; columelld quadriplicata. Axis 9 lin.
Hab. - ?
Cab. Cuming.
Marginella scripta. Mar. testd parva, retusè ovatd, cinerea, lineis nigris longitudinalibus valdè angulatis (zic-zac) sparsim maculatis; spira retusissima; labro intùs denticulato; columella quinqueplicatd, duabus superioribus transversis. Axis $3 \frac{1}{2}$ lin.
Hab. Straits of Macassar ; in eleven to fifteen fathoms, coarse sand.
Cab. Belcher.
Marginella livida. Mar. testd ovatâ, pallidè carulescente, obsoletè trifasciatd ; spird retusa; labro albido, valdè incrassato, intùs lavi; columella latè callosd, supra spiram ascendente, quadriplicata. Axis $6 \frac{1}{2}$ lin.
Hab. Cuba.
Cab. Grüner.
Shell ovate, dull pale blue, indistinctly banded by a darker colour ; the face covered by a white callosity spreading over the columella, ascending along the spire, and running into the labrum, which is thus thickened even beyond what is usual; the back shouldered and slightly angular.

It is to the liberality of M. Grüner that I am indebted for the opportunity of including this shell in these descriptions.

Marginella nodata. Mar. testá elongatè ovatd vel subfusiformi, luteo-olivaced, lineis nigris subflexuosis longitrorsum ornata, punctis concoloribus conspersis; spird elongatd, inconspicuè plicocostatd ; labro incrassato, intùs denticulato ; columella quadriplicatd. Axis 10 lin.
Hab. Cape Blanco, west coast of Africa; in from twelve to fifteen fathoms, among sand.

Cab. Belcher.
With the general aspect and character of $M$. Cleryii, but somewhat larger, more broadly shouldered, the longitudinal lines studded at intervals with dark spots, and which are somewhat regularly disposed in the transverse direction; and lastly, the spire is less elongated and furnished with rather indistinct pliciform ribs.

Marginella musica. Mar. testa ovatd, cinereo-olivaced, lineis nigris transversim ornata; spird retuso-conicâ ; labro paululùm incrassato, intùs lavi; columelld quadriplicatd. Axis 8 lin.
Hab. Cape Blanco, west coast of Africa; in thirty-five fathoms, sand.

Cab. Belcher.
Readily distinguished from any species hitherto recorded by the transverse, somewhat distant, and regularly disposed dark lines.

Marginella Belcheri. Mar. testd concinnè ovatd, albd, lineis eleganter punctatis raris, frequentioribus, vel confertis transversim dispositis, interdum albo fasciatd; spird mediocri, conicd; labro incrassato, albo, prope medium subdilatato, intùs lavi; columelld quadriplicatd. Axis 9 lin .

Hab. Cape Blanco, west coast of Africa; in from twelve to fifteen fathoms.

Cab. Belcher.
This very beautiful species displays considerable variation in the character of its markings. In some individuals the exterior is nearly white, with a few scattered transverse lines, composed of elegant minute dottings, and these are perhaps the older shells; from this they gradually become more and more covered with them, till in some the whole surface is quite darkened. In this latter case irregular lines become conspicuous in the longitudinal direction. In many specimens the transverse lines are separated by intervals, which permit the ground-colour of the shell to show through like milk-white bands. The outer lip seems in all cases to retain its uniform white colour, and at its upper part is slightly emarginate, but becomes thickened at and a little beneath the centre.

Marginella sapotilla. Mar. testd elongatè ovatd, ferè subcy-lindraceo-ovata; cinered vel glaucescente, concolore; spird retusoconicd; aperturâ intùs fuscá; labro incrassato, recto, albo, posticè fulvo, intùs lavi; columelld quadriplicata. Axis 11 lin .
Hab. Panama; in from five to thirteen fathoms, sandy mud.
Cab. Belcher et Cuming.
The American analogue of $M$. carulescens, or more correctly $M$. prunum, than which it is of smaller size, more cylindrical in shape, whence result its straight outer lip, less fullness and roundness of the shoulders, but without any disposition to that obscure banding which is visible in some specimens of M. prunum. Both species present a rich brown colour within the aperture, and in general appearance they are remarkably alike.

Marginella constricta. Mar. testd albidd, obscurè trifasciata; spird retusè conicd ; anfractu ultimo prope medium coarctato ; labro incrassato, medio incurvato, intùs lavi, supernè ad spiram adscendente ; columelld quadriplicatd. Axis 8 lin.
Hab. -?
Cab. Cuming.
Marginella nivosa. Mar. testd ovatá, cinereo-fuscd; maculis lacteis laceratis super lineas longitudinales dispositis; spird retusd; labro subrecto, incrassato, albo, ad spiram adscendente, intùs infra medium laviter denticulato ; columelld quadriplicatd. Axis 9 lin.

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\mathrm{Hab} . \text { ? }
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Cab. Cuming.
A full-shaped oval shell of a fawn colour, with longitudinal lines, as if marking the periods of growth, on which are aggregated small irregular milk-white spots; these are generally clustered on the lines, but a few occupy the intervals between them. The outer lip is of an uniform white, and beneath its middle are a few rather indistinct denticulations; above it ascends to the spire, which it renders callous on that side. Within it is of a pale fawn-colour.

Marginella pruinosa. Mar. testd ovatd, coarctata, albidd, obsoletè trifasciatd, maculis parvis lacteis conspersd; spird conico-
retusd, subcallosd; labro incrassato, paululùm incurvato, intùs laviter denticulato; aperturd angusta; columelld quadriplicatd. Axis. 6 lin.
Hab. West Indies.
Cab. Cuming.
In some respects similar to the foregoing, but, in the place of its full rounded form, this is contracted towards the middle of the bodywhorl. The fasciation is constant on all the specimens, but always very faint and indistinct, and the small milk-white spots are scattered with little regularity over the surface.

Marginella australis. Mar. testd retusè ovatd, albidd vel pallidè corned; spird conico-retusd ; labro incrassato, ponè albido, intùs lavi; columelld quadriplicatd, versus basin albo fasciatd. Axis $3 \frac{1}{3}$ lin.
Hab. North-west coast of Australia; in coral sand at low water. Mr. Dring, R.N.

Cab. Cuming.
The characters of this little shell are quite unobtrusive, if we except the white base of the columella; and this may serve to distinguish it from any species hitherto on record.

Marginella vitrea. Mar. testd coniformi, hyalind, nitidd; spird valdè retusa ; labro paululùm incrassato et reflexo, intùs lavi; columelld plicis quatuor gracilibus. Axis 3 lin.
Hab. West coast of Africa.
Cab. Belcher.
Marginella fusiformis. Mar. testa fusiformi, albidd vel pallidè corned ; spird elatd, obtusd ; anfractu ultimo gradatim attenuato; labro paululùm incrassato, intùs lavi; aperturd lineari ; columelld quadriplicatd. Axis 3 lin.
Hab. Straits of Malacca; in seventeen fathoms, mud.
Cab. Belcher.
This species departs so far from the usual outline of the genus as to become decidedly fusiform. The recent shell is most probably of a delicate horn-colour, though the prevailing number of our specimens are white, shining and glossy, and, there seems little doubt, have lost their original colour.

The following species belongs to a section of this genus, which might with much propriety be separated as a subgeneric group, under the name of Volvarina. They are all delicate and rather thin shells, with an apparent spire, the labrum never varixed, and usually not even thickened, with a sharp edge, always bent in on the aperture. The columellar folds are nearly constantly four in number, slender, and more or less oblique. M. avena, Valenciennes, is a typical species.

Marginella nitida (Volvarina). Mar. testd elongatè ovatâ, fusca, politd, nitidd, concolore ; spird conicd, obtusd; labro tenui, acuto, inflexo, pallido ; columelld quadriplicatd. Axis 4 lin.
Hab. $\qquad$
Cab. Cuming.

## Section II. Cryptospira.

Marginella tricincta. Mar. testa obeso-ovatd, cinereo-carulescente, fusco trifasciatd, labro incrassato, luteo, intùs lavi; columelld sexplicatd, ad basin albd; plicis tribus superioribus transversis, supremd paululùm obsoleta. Axis 11 lin.
Hab. Straits of Macassar ; in eleven fathoms, coarse sand.
Cab. Belcher.
Marginella blanda. Mar. testd ovatd, tenui, sardonychid, obsoletè fasciatd; spird vix occulta, pallidd; labro subincrassato et subreflexo, intùs levi; columella albidd, sexplicatd, plicis superioribus evanidis. Axis 9 lin.
Hab. Cape Blanco, west coast of Africa; in twelve to fifteen fathoms.

Marginella imbricata. Mar. testa ovatd, albidá, maculis rufis quadratis propè medium unifasciatd, aliter punctis transversis ordinatè vestitd ; apice puncticulato; labro reflexo medio et cum basi columella ustulato ; columelld subcallosd,quadriplicatd. Axis 5 lin.
Hab. Acapulco. Col. Moffat.
Cab. Cuming.
In one specimen the tessellated band which encircles the bodywhorl is broken up into a number of small spots and punctations, so that though these markings present usually a nearly square shape, they are most probably disposed to vary. The shell in some respects approaches M. interrupta.

Marginella muralis. Mar. testa elongatè ovata, ferè subcylindraced, lacted, nitidd; maculis pallidè rufis quadratis transversis ornatd, interdum albo marginatis, majoribus per series tres dispositis; labro vix incrassato, subinflexo, intùs sulcato; columelld plicis tribus inferioribus distinctis, obliquis, alteris superioribus obsoletis'transversis. Axis $5 \frac{1}{2}$ lin.
Hab. - ?
Cab. Cuming.
This is a remarkably pretty glittering species, and the specific name seems justified by the appearance of the pale red regularlydisposed square markings, which resemble the extremities of the bricks in a wall. The labrum is not merely toothed within, but distinctly sulcate. It approaches M. Kiener's M. maculosa, but the ornation is quite of a different character, and it has no angular elevation on the body-whorl.

Marginella sagittata. Mar. testd retuso-ovatd, pallidd, lineis rufis sagittatis transversis, alteris longitudinalibus confluentibus, ornata ; apice puncticulato; labro subinflexo, intùs lavi; columella vix quadriplicatd. Axis 5 lin.
Hab. Brazils: Humphreys.
Cab. Cuming.
Shell shortened, ovate, the ornation consisting of reddish brown, transverse, arrow-headed markings, disposed in regular series and connected by waved longitudinal lines. The labrum is not the least
thickened，and slightly inflexed，and the superior fold of the columella is scarcely distinguishable．

## May 14．－Rev．John Kirby in the Chair．

The conclusion of the paper by Dr．Falconer and Capain Cautley on the Gigantic Fossil Tortoise of India was read ：－
＂On a former meeting we went through the anatomical characters presented by the remains of the Colossochelys Atlas．Commencing with the plastron，we traced the modifications of form through the costal elements of the carapace and the dorsal vertebræ，all of which bear the closest resemblance to the ordinary type of the Chersite Che－ lonians，or true land tortoises．A like result followed the examina－ tion of the extremities，which，as exhibited in the remains of the humerus，femur and ungueal phalanges，were seen to be constructed exactly on the plan of Testudo，with columnar legs and truncated club－shaped feet，as in the proboscidean Pachydermata．The same direction of affinity was observed throughout the conformation of the head．The only portions of the skeleton from which more or less direct evidence was not derived，were the neck and tail vertebræ，of which there were no specimens in the collection．The general re－ sult of the examination showed that the Colossochelys Atlas was strictly a land tortoise in every part of its bony frame；and the im－ pressions of the horny scutes proved the like in regard to the arrange－ ment of its dermal integument．
＂The principal distinctive characters were found in the sternum， which is enormously thickened at its anterior extremity，along the united portion of the episternal bones，and contracted into a narrow neck，so that the width of the combined episternals does not much exceed their thickness ：this thickened portion bears on its under side a deep massive cuneiform keel，which terminates upon the commence－ ment of the entosternal piece．There is more or less thickening of this part in all the species of Testudo，and the amount of it is very variable in different individuals of the same species；but there is nothing approaching the same degree of contraction in reference to the thickness，nor aught like a developed keel，in any of the existing land tortoises which we have either had an opportunity of examining， or seen described in systematic works on the tribe．The keel in the fossil is feebly shown in the young animal，but strongly marked in the adult．Conceiving that generic distinctions are only legitimate in the case of well－defined modifications affecting some of the leading characters in the organization of an animal，we do not consider our－ selves warranted in attaching a higher systematic importance to the Colossochelys than as a subgenus of Testudo，which may technically be defined thus（the distinction resting mainly on the form of the sternum）：－

## Subgen．Colossuchelys．

Testa solida，immobilis，sterno anticè in collum valdè incrassatum， subtùs carind crassâ cuneiformi instructum，angustato．Testudo terrestris，staturâ et mole ingenti（inde nomen кo入oб⿱宀̀̀s et $\chi$ é̀ $\nu s$ ）
sui tribus prodigium! Olim in Indiæ orientalis provinciis septentrionalibus degebat.
" Colossochelys Atlas.-The first fossil remains of this colossal tortoise were discovered by us in 1835 in the tertiary strata of the Sewalik Hills, or Sub-Himalayahs skirting the southern foot of the great Himalayah chain. They were found associated with the remains of four extinct species of Mastodon and Elephant, species of Rhinoceros, Hippopotamus, Horse, Anoplotherium, Camel, Giraffe, Sivatherium, and a vast number of other Mammalia, including four or five species of Quadrumana. The Sewalik fauna included also a great number of reptilian forms, such as crocodiles and land and freshwater tortoises. Some of the crocodiles belong to extinct species, but others appear to be absolutely identical with species now living in the rivers of India: we allude in particular to the Crocodilus longirostris, from the existing forms of which we have been unable to detect any difference in heads dug out of the Sewalik Hills. The same result applies to the existing Emys tectum, now a common species found in all parts of India. A very perfect fossil specimen, presenting the greater part of the evidence of the dermal scutes, is undistinguishable from the living forms, not varying more from these than they do among each other. Prof. Thomas Bell, the highest living authority on the family, after a rigid examination, confirms the result at which we had arrived, that there are no characters shown by the fossil to justify its separation from the living Emys tectum. There are other cases which appear to yield similar results, but the evidence has not yet been sufficiently examined to justify a confident affirmation of the identity at present.
"The remains of the Colossochelys were collected during a period of eight or nine years along a range of eighty miles of hilly country : they belong in consequence to a great number of different animals, varying in size and age. From the circumstances under which they are met with, in crushed fragments, contained in elevated strata which have undergone great disturbance, there is little room for hope that a perfect shell, or anything approaching a complete skeleton, will ever be found in the Sewalik Hills. It is to be mentioned, however, that remains of many of the animals associated with the Colossochelys in the Sewalik Hills have been discovered along the banks of the Irrawaddi in Ava, and in Perim Island in the Gulf of Cambay, showing that the same extinct fauna was formerly spread over the whole continent of India.
"This is not the place to enter upon the geological question of the age of the Sewalik strata; suffice it to say, that the general bearing of the evidence is that they belong to the newer tertiary period. But another question arises: 'Are there any indications as to when this gigantic tortoise became extinct? or are there grounds for entertaining the opinion that it may have descended to the human period!' Any à-priori improbability, that an animal so hugely disproportionate to existing species should have lived down to be a contemporary with man, is destroyed by the fact that other species of Chelonians which were coeval with the Colossochelys in the same
fauna, have reached to the present time; and what is true in this respect of one species in a tribe, may be equally true of every other placed under the same circumstances. We have as yet no direct evidence to the point, from remains dug out of recent alluvial deposits; nor is there any historical testimony confirming it; but there are traditions connected with the cosmogonic speculations of almost all Eastern nations having reference to a tortoise of such gigantic size, as to be associated in their fabulous accounts with the elephant. Was this tortoise a mere creature of the imagination, or was the idea of it drawn from a reality, like the Colossochelys?
" Without attempting to follow the tortoise tradition through all its ramifications, we may allude to the interesting fact of its existence even among the natives of America. The Iroquois Indians believed that there were originally, before the creation of the globe, six male beings in the air, but subject to mortality. There was no female among them to perpetuate their race; but learning that there was a being of this sort in heaven, one of them undertook the dangerous task of carrying her away. A bird (like the Garūda of Vishnoo or the Eagle of Jupiter) became the vehicle. He seduced the female by flattery and presents : she was turned out of heaven by the supreme deity, but was fortunately received upon the back of a tortoise, when the otter (an important agent in all the traditions of the American Indians) and the fishes disturbed the mud at the bottom of the ocean, and drawing it up round the tortoise formed a small island, which increasing gradually became the earth. We may trace this tradition to an Eastern source, from the circumstance that the female is said to have had two sons, one of whom slew the other; after which she had several children, from whom sprung the human race.
" In this fable we have no comparative data as to the size of the tortoise, but in the Pythagorean cosmogony the infant world is represented as having been placed on the back of an elephant, which was sustained on a huge tortoise. It is in the Hindoo accounts, however, that we find the fable most circumstantially told, and especially in what relates to the second Avatar of Vishnoo, when the ocean was churned by means of the mountain Mundar placed on the back of the king of the tortoises, and the serpent Asokee used for the churningrope. Vishnoo was made to assume the form of the tortoise and sustain the created world on his back to make it stable. So completely has this fable been impressed on the faith of the country, that the Hindoos to this day even believe that the world rests on the back of a tortoise. Sir William Jones gives the following as a translation from the great lyric poet Jyadeva: 'The earth stands firm on thy immensely broad back, which grows larger from the callus occasioned by bearing that vast burden. O Cesava! assuming the body of a tortoise, be victorious! Oh! Hurry, Lord of the Universe!'
"The next occasion in Indian mythology where the tortoise figures prominently is in the narratives of the feats of the bird-demigod 'Garūda,' the carrier of Vishnoo. After stating the circumstances of his birth, and the disputes between his mother Vinūta and 'Kudroo,'
the mother of the serpent, it is mentioned that he was sent on an expedition to bring 'Chundra' the moon, from whom the serpents were to derive the water of immortality. While pursuing his journey, amidst strange adventures, Garūda met his father Kŭshyŭfa, who directed him to ' appease his hunger at a certain lake, where an elephant and tortoise were fighting. The body of the tortoise was eighty miles long-the elephant's 160. Garüda with one claw seized the elephant-with the other the tortoise, and perched with them on a tree 800 miles high.' He is then, after sundry adventures, stated to have fled to a mountain on an uninhabited country, and finished his repast on the tortoise and elephant.
" In these three instances, taken from Pythagoras and the Hindoo mythology, we have reference to a gigantic form of tortoise, comparable in size with the elephant. Hence the question arises, are we to consider the idea as a mere fiction of the imagination, like the Minotaur and the chimæra, the griffin, the dragon, and the cartazonon, \&c., or as founded on some justifying reality? The Greek and Persian monsters are composed of fanciful and wild combinations of different portions of known animals into impossible forms, and, as Cuvier fitly remarks, they are merely the progeny of uncurbed imagination ; but in the Indian cosmogonic forms we may trace an image of congruity through the cloud of exaggeration with which they are invested. We have the elephant, then as at present, the largest of land animals, a fit supporter of the infant world; in the serpent Asokee, used at the churning of the ocean, we may trace a representative of the gigantic Indian python; and in the bird-god Garūda, with all his attributes, we may detect the gigantic crane of India (Ciconia gigantea) as supplying the origin. In like manner, the Colossochelys would supply a consistent representative of the tortoise that sustained the elephant and the world together. But if we are to suppose that the mythological notion of the tortoise was derived, as a symbol of strength, from some one of those small species which are now known to exist in India, this congruity of ideas, this harmony of representation would be at once violated; it would be as legitimate to talk of a rat or a mouse contending with an elephant, as of any known Indian tortoise to do the same in the case of the fable of Garüda. The fancy would scout the image as incongruous, and the weight even of mythology would not be strong enough to enforce it on the faith of the most superstitious epoch of the human race.
" But the indications of mythological tradition are in every case vague and uncertain, and in the present instance we would not lay undue weight on the tendencies of such as concern the tortoise. We have entered so much at length on them on this occasion, from the important bearing which the point has on a very remarkable matter of early belief entertained by a large portion of the human race. The result at which we have arrived is, that there are fair grounds for entertaining the belief as probable that the Colossochelys Atlas may have lived down to an early period of the human epoch and become extinct since:-1st, from the fact that other Chelonian species and
crocodiles, contemporaries of the Colossochelys in the Sewalik fauna, have survived; 2nd, from the indications of mythology in regard to a gigantic species of tortoise in India.
" Some of the bones were analysed with great care by Mr. Middleton, and yielded a large proportion of fluorine, the constituents being,-

$$
\begin{aligned}
& \text { Phosphate of lime ........... } 64 \cdot 95 \\
& \text { Carbonate of lime . . . . . . . . . } 22 \cdot 36 \\
& \text { Fluoride of calcium .. ...... } 11 \cdot 68 \\
& \text { Oxide of iron ................ . } 1 \cdot 00 \\
& \text { A trace of chloride of soda. } \\
& 99 \cdot 99
\end{aligned}
$$

" Other Sewalik fossil bones were at the same time subjected to analysis, such as the Mastodon elephantoides, Camelus sivalensis, Horse, Ruminants, \&c., and the whole of them yielded similar results, with a proportion of fluoride of calcium varying from 9 to 11 per cent. This is much above the usual quantity found in fossil bones; the utmost that has been met with having been in bones of the Anoplotherium from the Paris basin, 14 per cent."

May 28.-William Horton Lloyd, Esq., in the Chair.
The following extracts were read from a letter from Robert Templeton, Esq., M.D., Corr. Mem., Royal Artillery, Colombo, Ceylon :-
"You will be glad to learn that I yesterday heard of a new monkey, which I imagine, from the description, must belong to the same genus as the Wanderoo. Every day brings some novelty to my notice, but I regret to say that although I have many promises from officers at out-stations, I do not receive specimens as fast as I could wish.
"You may announce to the Society that I had an accouchement in my house of a Loris, the affair occupying about half an hour, at the end of which a little naked object was fully in the world, about two inches long, like a young mouse, perfectly without covering, a large head, attenuate body, and excessively slender legs; the face and eyes were proportionally much smaller than in the older animal. It clung to the mother so tenaciously, that I believe it would have almost parted with its legs rather than let go its hold. The mother died on the following night and the young one immediately after, so that I had little time for observing them. You will perceive from the half-finished sketch I enclose that it is not at all entitled to the usual appellation of dog-like, which has been derived I presume from the drawings having hitherto been made from stuffed specimens.
"The loss of the 'Memnon' has been a matter of serious concern to me, as she carried a paper which cost much trouble, and of which I foolishly destroyed the copy; unfortunately, since that time I have had neither leisure nor specimens from which to work out another. In the meantime I wish you to inform the Society that there is found in the alpine regions of Ceylon during the rainy season enormous worms, reaching from twenty to forty inches in length, and about
an inch or $1 \frac{1}{2}$ inch in thickness. From the size and colour I have adopted the name of Megascolex cervleus.
" The body is composed of 270 rings, the sexual organs occupying the 16 th, 17 th and 18 th ; between this part and the head it is somewhat ventricose, but at the 17 th ring there is a decided narrowing. Each ring is dilated in the middle of its length into a ridge, which carries on it, except in the mesial line of the back, minute conical mammillæ, 100 in number, each surmounted with a minute bristle, arched backwards; the dermoid covering is striated in opposite directions diagonally, to admit of the contractions of the muscles beneath ; dorsally the depressed parts of the rings are deep bright blue, which becomes gradually narrowed as it descends the sides, and terminates abruptly, leaving the inferior parts orange-yellow, but the absolute ventral part is pure yellow.
"The intestinal canal is very large, extending to within an eighth of an inch of the surface, and supported on all sides by a series of membranous partitions, attached externally to the edge of each ring. The walls of the intestine are composed of strong but fine membrane, which is separable into layers, but is without any distinct appearance of fibres; exterior to this are the muscular bundles, which serve for the progressive movements of the animal ; they are compound, whitish, shining fibres, collected into longitudinal fasciculi, separated by tolerably strong cellular membrane, and are deficient, as far as I am aware, only in one position.
"In all works which I have examined it is stated (I think originally by Sir Everard Home) that the respiration of this tribe is carried on through a system of pores on the sides of the animal, as in the leech. This is a complete mistake; the facts are as follows :Along the middle line of the back, as I have before noticed, the mammillary projections are deficient for a space about one-tenth of an inch broad, and in the interval between each ring in this situation is a small transverse narrow ridge, in the centre of which, and occupying its whole breadth, is the orifice of the respiratory apparatus, a narrow oval; they are first visible in the interval between the 14th and 15th ring, and terminate between the 17th and 18th from the tail, being most developed at half the length of the animal, or rather a little nearer the tail. The artery runs along the whole back of the worm, sending off lateral branches at the position of the septa, and at the place where the respiratory orifices open externally it forms the inferior boundary of a little quadrangular space, shut up on all sides by cellular membrane, so as to present the appearance of a little sac like a reticule, with a rectangular bottom; the sides of this space are formed as follows: the muscle becomes deficient there, taking a new attachment, and having a new origin beyond the orifice, the profile being arched rather abruptly, and thus we have an anterior and posterior wall; the lateral are formed by the muscular bundles of either side, and the shape must necessarily be more or less quadrangular, in fact nearly square : the membrane forming the immediate walls of the sac is so fine and so loose that I failed in all attempts to trace its form inside, but I satisfied myself of there being
a distinct cavity, by introducing from the outside a small blunted wire, with which I gently pressed the sides; it seemed however not so extensive anteriorly, posteriorly, and at the angles, as I should have supposed from the form of the more solid supports outside.
" The rest of the anatomy of this animal I must leave until I can procure more specimens and have more leisure.
" When I first got the Megascolex I was sure I had obtained an animal which would break down the old division of Abranches setigères and $A$. sans soies, for the bristles are so minute that I did not in the first instance perceive them. As to its being a true Lumbricus there could be no doubt. I was much gratified when I discovered that the separation of the tribes, founded on a character which indicates their respective terrestrial and aquatic habits, was correct, and gave due credit to its proposer."
" Monograph of the genus Myadora, a small group of Acephalous Mollusks of the family Myaria," by Lovell Reeve, Esq.

## Genus Myadora, Gray.

Testa trigono-ovata, inequivalvis, valva sinistra plus minusve concava, dextrd pland, rarò concaviusculd; inaquilateralis, latere postico rotundato, antico leviter flexuoso, coarctato, infernè plerumque truncato, depressione plano-concavà sub umbones. Cardo : dentibus in valva dextra duobus lateralibus, elongatis, rudibus, ab umbone divergentibus, quorum posticus planus, subobsoletus; in valva sinistrd projecturis sulcatis duabus lateralibus, dentes recipientibus. Ligamentum internum in fovea trigond centrali inter dentes insertum, appendice testaced concavd scpè internè protectum. Valve intus margaritacea, pallii impressione musculari anticè sinuatd.
The genus Myadora, introduced by Mr. Gray in his account of the 'Shells of Molluscous Animals,' in the 'Synopsis of the Contents of the British Museum,' is one that cannot fail to be appreciated; nothing indeed can more fully demonstrate the necessity for a new generic allotment of certain species, than the circumstance of their having been transported at different times from one genus to another by the same author*.

The Myadore partake of the characters of Anatina and Pandora, and as they have been referred at times to both of those genera, it is important to describe with some minuteness the differences which entitle them to generic distinction. In Anatina the hinge is com-

* "In an Appendix to a Catalogue of Shells collected in the Australian and Polynesian group, by Mr. S. Stutchbury," says Sowerby, in his account of the genus Pandora, 'Species Conchyliorum,' Part 1, "I have described, under the name of Pandora brevis, a shell (Myadora brevis, nobis) which I am now convinced is rather an Anatina, inasmuch as its flat valve is destitute of the blunt tooth which characterizes the Pandore; it differs also from them in having a sinus in the muscular impression of the mantle, and in being possessed of a small testaceous appendage attached to the ligament." This shell it will be seen however has not the spoon-shaped processes of Anatina.
posed of two hollow spoon-shaped processes, containing the ligament, protected in some species by a moveable testaceous clavicle, which crosses the dorsal axis of the shell on the posterior side, as in the Anatina truncata, for example, a species now commonly obtained with the accessory hinge-piece complete.

In Pandora, which is too flat and compressed a shell to admit any structure like the spoon-shaped processes of Anatina, the ligament is lodged in a cicatrix, protected on the posterior side by a single central oblong tooth in the right valve only ; the clavicle is dispensed with, but the loss is in a degree supplied by a thickening and folding over of the dorsal margin.

In Myadora, which being a thicker shell requires a hinge of more solid structure, the peculiarities above noted in Anatina and Pandora, the clavicle of the former, the folded margin of the latter, are united in the following modified condition. The dorsal margin of the right valve of Myadora becomes consolidated into a tooth-like ledge or projection, diverging from, on each side, the umbo, fitting into grooved projections of similar construction in the left valve; and by the diverging of these tooth-like projections a compact triangular cavity is obtained for the insertion of the ligament, which in some species is walled in, as it were, internally, not laterally as in Anatina, by a moveable testaceous clavicle forming an angle with the diverging ledges.

The clavicles of Anatina and Myadora, it may be observed, are very differently situated with respect to the ligament, the one being a side appendage, extending across the dorsal axis of the shell ; the other an internal appendage, parallel as it were to the dorsal axis.

Of the following ten species, which I propose to refer to this genus, the grand type, Myadora striata, is an inhabitant of Port Nicholson, New Zealand, and the remainder are for the most part collected by Mr. Cuming in the Philippine Islands.

1. Myadora crassa. Anatina crassa, Stutchbury, Zool. Journ. vol. v. p. 100 ; Tab. Supp. xliii. f. 5 and 6.
Conch. Iconica, Myadora, pl. 1. f. 1.
Hab. -?
This short rounded species is the only one at present known in which the right valve is concave.
2. Myadora trigona. Myad. testa trigond, valdè plano-depressa, usque marginem concentrice striatd, striis prominentibus, quasi carinulatis, prope marginem anticam undatis; umbonibus acutissimè mucronato-elevatis.
Conch. Iconica, Myadora, pl. 1. f. 2.
Hab. Catanauan, province of Tayabas, island of Luzon.
Four odd valves only of this interesting little species were collected by Mr. Cuming at the above-mentioned locality.
3. Myadora plana. Myad. testd trigono-oblongd, anticè subtrun. catd, planissima, concentricè striatá, striis subdistantibus, valva sinistre prominentioribus.
Conch. Iconica, Myadora, pl. 1. f. 3. $a$ and $b$.

Hab. Baclayon, island of Bohol, Philippines (found in sandy mud at the depth of seventeen fathoms); Cuming.

This species is chiefly distinguished from its congeners, the Myadora tincta and trigona, by its more oblong shape.
4. Myadora ovata. Myad. testd ovatd, subtriangulari, valvd sinistra ventricoso-concava, dextrd leviter convexa, concentricè striata, striis elevatis, prope marginem anticam subobsoletis, valve dextra numerosis, confertis, sinistre prominentibus, subdistantibus, umbonibus depresso-incurvis.
Consh. Iconica, Myadora, pl. 1. f. 4.
Hab. San Nicolas, island of Zebu, Philippines (found in sandy mud at the depth of six fathoms) ; Cuming.

This species exhibits a greater disparity in the sculpture of the valves than any other, the striæ of the right valve being very fine and close-set, whilst those of the left are almost keel-like and comparatively distant.
5. Myadora tincta. Myad. testâ trigonâ, anticè subtruncata, usque marginem concentricè striata, striis elevatis, prominentibus ; fuscescente tincta.
Conch. Iconica, Myadora, pl. 1. f. 5.
$H a b$. Island of Ticao, Philippines (found in coral sand at the depth of six fathoms); Cuming.

The Myadora tincta scarcely differs from the Myadora plana, except in being of a less oblong and more triangular form.
6. Myadora striata, Gray, MSS. British Museum; Pandora striata, Deshayes.
Conch. Iconica, Myadora, pl. 1. f. 6. $a, b$, and $c$.
Hab. Port Nicholson, New Zealand; Swainson.
This is the grand type of the genus, and of much larger size than any other species.
7. Myadora brevis. Anatina brevis, Stutchbury, Zool. Journ. vol. v. p. 99 ; Tab. Supp. xliii. f. 1 and 2.
Conch. Iconica, Myadora, pl. 1. f. 7.
This is a very interesting form, and the striæ of the left valve are peculiarly wrinkled.
8. Myadora oblonga. Myad. testá trigono-oblongâ, anticè latissimè truncatd, concentricè striatd, striis elevatis, regularibus, prope marginem anticam angulatis.
Conch. Iconica, Myadora, pl. 1. f. 8.
Hab. Island of Mindoro, Philippines; Cuming.
The anterior side of this species is the most broadly truncated of any.
9. Myadora curvata. Myad. testa curvato-oblongâ, valva dextra convexiusculâ, anticè subindistinctè flexuoso-costatâ, concentricè striata, striis elevatis, angustis, regularibus.
Conch. Iconica, Myadora, pl. 1. f. 9.
Hab. Island of Corrigidor, Philippines ; Cuming.
This species differs also in form rather than in variety of sculpture.
10. Myadora Pandoreformis. Anatina Pandoraformis, Stutchbury, Zool. Journ. vol. v. p. 99 ; Tab. Supp. xliii. f. 3 and 4.
Conch. Iconica, Myadora, pl. 1. f. 10.
The Myadore striata, brevis, and Pandoraformis are the only species of the genus at present known to have the clavicle.

The Secretary called the attention of the Meeting to a specimen of the Two-toed Sloth, Bradypus diductylus, which was now in the Gardens, and requested Mr. Ball, Secretary to the Royal Zoological Society of Ireland, to communicate such particulars connected with the habits and manners of this curious animal as had fallen under his observation.

Mr. Ball regretted that it was out of his power to state the exact locality from which the animal had been obtained; however, he had reason to believe that it was brought from Demerara.

Its general food was sea-biscuit and water; of fruit it partook sparingly, but he had observed it pick the young buds of the hawthorn flowers and eat them with great avidity.

While in the Zoological Gardens at Dublin its favourite position was where it was supported partly by the branch to which it clung, and partly by an adjoining branch on which its back could rest.

In lapping water, the great length to which its tongue was protruded was very remarkable, thereby showing its affinity to the other Edentata of South America.

## BOTANICAL SOCIETY OF EDINBURGH.

This Society held its first meeting for the session on Thursday the 12th of December 1844, Dr. Seller in the Chair.

Numerous donations to the library and museum were announced, particularly from Dr. Fraser, Algoa Bay, eleven volumes of botanical works and specimens of Cape woods and plants. From the Rev. J. E. Leefe, the second Fasciculus of his 'Salictum Britannicum Exsiccatum.' From Dr. Dewar, Dunfermline, plants from the river Congo, \&c. From Mr. Charles Lawson, jun., plants from the Rocky Mountains, \&c. The thanks of the Society were voted to the respective donors.

The following communications were read:-

1. "Notice of the discovery of Alsine stricta in Teesdale," by Messrs. J. S. Gibson and J. Tatham, jun.
2. "On the genus Spirulina," by Mr. Ralfs. One species only, the S. tenuissima (Kutz.) was described. [This paper will shortly appear in the 'Annals,' and in the forthcoming series of the Society's Transactions.]
3. "Notice of the discovery of Cirsium setosum, Bieb.,nearCulross," by Dr.Dewar. [Notices of the discovery of this and of Alsine stricta have already appeared in the 'Annals of Natural History.']
4. "Journal of a Tour through part of the United States and the Canadas" (continued), by Mr. James M‘Nab.

In the last part of this paper, read before the Society, Mr. M‘Nab

